Denali National Park and Preserve Date: 02/07/2014

Categorical Exclusion Form

Project: Continuation of Gravel Extraction from Toklat

PEPC Project Number: 49298

Project Description:

This CE will allow continued gravel extraction from the Toklat River per the 2003 EA for a Gravel Acquisition Plan for Denali National Park and Preserve, through 2015 when it will be re-evaluated. The CE will also allow the use of additional extraction methods which mimic natural river patterns within the extraction area and enhance recovery or eradication of visible impacts.

The Toklat floodplain within the extraction area contains landforms such as elevated areas which provide an excellent source of material. However, use of the only currently approved method of "mirror channel excavation" does not mimic how normal river processes act within this type of landform and have resulted in impacts that have not met replenishment or eradication standards.

The CE modifies the original EA language to allow for the use of additional extraction methods when they are appropriate for the floodplain landform being excavated. The standards for the CE are:

Specifications for floodplain excavations are: 1. The natural action of the river will eradicate or replenish excavations within five years. 2. Excavation methods will mimic natural river processes and not cause potentially detrimental changes in the drainage course.

Park studies, extraction method experimentation and multiple floodplain material excavations since 1992 have resulted in increased understanding of extraction impacts/mitigation and have determined that the following design parameters and methods will yield excavations that meet the above specifications.

Excavation methods to be used are: 1. Mirror Channel: Mirror images of and connected to bends in natural channels. The length, depth, and slope of the excavated channels would generally match the natural channel segments.* 2. Maisie Braid: Similar to a mirror channel scrape but is a series of excavations consisting of multiple braids off of an active channel or active mirror channels which generally match the depth and slope of the base channel.* 3. Lateral Migration: An excavation mimicking a natural river process along the edge of a deeper landform (alluvial fan or deeper floodplain area) within the floodplain where the natural process of the river is to erode along a face instead of creating braided channels. Channel type extractions into these landforms leave unnatural looking excavations which take longer than five years to eradicate. 4. Experimental Excavation - A test extraction which seeks to evaluate a new method or mimic an observed river process which is not already being used. When used, an experimental scrape will fit within the reclamation timeline. The purpose is to discover and develop new methods which help mitigate impacts. The Maisie Braid and Lateral Migration extractions are examples of methods that were developed through limited experimentation and which have enhanced the ability to eradicate visual impacts and accelerate reclamation.

*Excavated channel widths (estimated to be approximately 45' but not to exceed 55') in methods 1 and 2 will allow rock trucks to work and travel within a channel being excavated. This will help limit haul road impacts on elevated areas of the floodplain adjacent to excavated channels and enhance eradication of impacts.

All methods should still avoid working directly in running water except when connecting to an active channel and extractions should be made to floodplain groundwater levels which serve as a depth and grade guide.

See the document link in PEPC for attached supporting documentation on additional suggested extraction methods.

Project Locati	ons:			
Location	V			
County: District: Geo. Marker:	Denali	State: Section: Other:	AK	
Mitigation(s):				
No miti	gations identified.			
Describe the o	ategory used to excluy (see Section 3-4 of	ude action from further N DO-12):	IEPA analysis and in	dicate the number
B.1 Changes of environmental i	r amendments to an ap impact.	pproved plan, when such c	hanges would cause n	o or only minimal
Explanation: Toklat floodplai processes.	n extraction approved t	for 2014 season. All extrac	tion methods will mim	ic natural floodplain
am tamiliar, i a exceptional cii	ım categorically exclı rcumstances (e.g. all	mpact information in the uding the described proje boxes in the ESF are ma bed in Section 3-4 of DO-	ect from further NEPA rked "no") or condition	A analysis. No
Superintenden	it: This	Signature 97. 96	Date:	7/14
NPS Contact:			Date:	